

IN THE CLAIMS

Please amend the following claims.

1. (Currently Amended) A method, comprising:
determining a reference resistance of an electrochemical deposition cell including a reference wafer;
determining a calibration resistance of an electrochemical deposition cell including a calibration wafer;
comparing the reference resistance with the calibration resistance; and
selecting an error trigger value based on the comparing of reference resistance with the calibration resistance.
2. (Currently Amended) The method of claim 1, wherein determining a reference resistance comprises:
measuring a first electrochemical deposition cell voltage with [[of]] the reference wafer; and
calculating the reference resistance using the first electrochemical deposition cell voltage with [[of]] the reference wafer.
3. (Currently Amended) The method of claim 2, further comprising measuring a first plurality of electrochemical deposition cell voltages with [[of]] the reference wafer at a corresponding first plurality of electrochemical deposition currents.

4. (Currently Amended) The method of claim 2, wherein determining a calibration resistance comprises:

measuring a second electrochemical deposition cell voltage with [[of]] the calibration wafer; and

calculating the calibration resistance using the second electrochemical deposition cell voltage with [[of]] the calibration wafer.

5. (Currently Amended) The method of claim 2, further comprising measuring a second plurality of electrochemical deposition cell voltages with [[of]] the calibration wafer at a corresponding second plurality of electrochemical deposition currents.

6. (Original) The method of claim 1, further comprising monitoring a electrochemical deposition of one or more production wafers using the selecting error trigger value.

7. (Currently Amended) The method of claim 6, wherein monitoring further comprises:

measuring the electrochemical deposition cell voltages with [[of]] the one or more production wafers; and

determining when one of the electrochemical deposition cell voltages with [[of]] the one or more production wafers is approximately equal to or greater than the edge trigger value.

8. (Currently Amended) The method of claim 7, further comprising aborting the electrochemical deposition of the one or more production wafers when the one of the electrochemical deposition cell voltages with [[of]] the one or more production

wafers is determined to be approximately equal or greater than the edge trigger value.

9. (Currently Amended) The method of claim 7, wherein the error trigger value is selected to be approximately a 25% difference from a measured first electrochemical deposition cell voltage with [[of] the reference wafer.

10. (Original) The method of claim 1, wherein the reference wafer has a conducting layer disposed over a non-conducting layer, the non-conducting layer is substantially covered with the conducting layer at an edge of the reference wafer, and wherein the calibration wafer has a conducting layer disposed over a non-conducting layer, the non-conducting layer, the non-conducting layer of the calibration wafer is substantially uncovered by the conducting layer of the calibration wafer at an edge of the calibration wafer.

11. (Original) The method of claim 10, wherein the conducting layers of the calibration and reference wafers are seed layers.

12-21. (Canceled)